

MOPHIMS NEWSLETTER

Stay up to date with the Missouri Public Health Information Management System



Community Data Profiles



Data MICAs



Environmental Tracking

HELLO, MOPHIMS USERS!

In this 2023 issue, we dig into how you can access data regarding skin cancer rates in Missouri. There is also a practice exercise to test your MOPHIMS query-building skills using the MOPHIMS Data MICAs. Finally, we round out this issue by providing you with the most current data available for access.

THIS MONTH'S ISSUE INCLUDES:

- Sun Safety
- EPHT StoryMaps
- MOPHIMS Practice Exercise
- Available MOPHIMS Data

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Sun Safety

Sun Safety

June 21st officially marked the first day of summer. We hope you all have a safe, relaxing summer filled with great memories. Bring on the vacations, BBQs, camping trips and other outdoor activities... but don't forget the sunscreen!

Sunscreen plays a vital role in blocking ultraviolet (UV) radiation from being absorbed by the skin. Although protection from UV rays is important all year long, it's no surprise UV radiation is greatest in the summer months. Too much exposure to UV light damages the skin. This can lead to sunburns, premature aging and the development of skin cancer.

The Center for Disease Control recommends applying a broad spectrum sunscreen with an SPF of 15 or higher before going outside. You should reapply after sweating, swimming or being out in the sun for longer than 2 hours.

What else can you do to decrease the risks of too much UV exposure?

- Find shade
- Wear long pants, long sleeves and a hat if possible
- Wear sunglasses
- Did we mention sunscreen?

Tanning

It is important to note outdoor and indoor tanning can have severe consequences. Tanning is a sign of skin damage- it's evidence of DNA injury to your skin.² So just how risky is outdoor and indoor tanning to your skin and health? Check out the facts below, and in the meantime consider using sunless tanning products to get that "sun-kissed" glow.



There is a 75% increased risk of developing life-threatening melanoma from just one indoor tanning session before age 35.

Worldwide, there are more skin cancer cases due to indoor tanning than there are lung cancer cases due to smoking.

Tanning does not protect against sunburn; it simply exposes you to more harmful UV rays.

Tanning — indoors or with the sun — makes your skin age more quickly.

One study observing 63 women diagnosed with melanoma before age 30 found that 61 of them — that's 97 percent — used tanning beds.

Each time you tan, the damage builds up, creating more genetic mutations and greater risk.

Source: Tanning. The Skin Cancer Foundation. <https://skincancer.org/risk-factors/tanning/>

Skin Cancer

As mentioned, evidence suggests not taking precautions while exposed to UV rays increases your risk for skin cancer. MOST nonmelanoma skin cancers and a large percentage of melanomas are associated with exposure to UV rays from natural sunlight and/or indoor tanning.²

Nonmelanoma skin cancer refers to any cancer that forms in the basal, squamous or Merkel cells of the skin. Basal cell carcinoma and squamous cell carcinoma often occur in sun-exposed areas of your body.

Melanoma, the most serious type of skin cancer, begins in melanocytes, the skin cells that produce the melanin pigment that gives the skin its color.³ Melanoma can develop anywhere on your body including skin that isn't exposed to the sun. Of all types of skin cancer, melanoma causes the most deaths because of its tendency to spread to other parts of the body, including vital organs.⁴ Melanoma is highly treatable if detected early.

Skin self-exams are one way you can detect early signs of skin cancer.

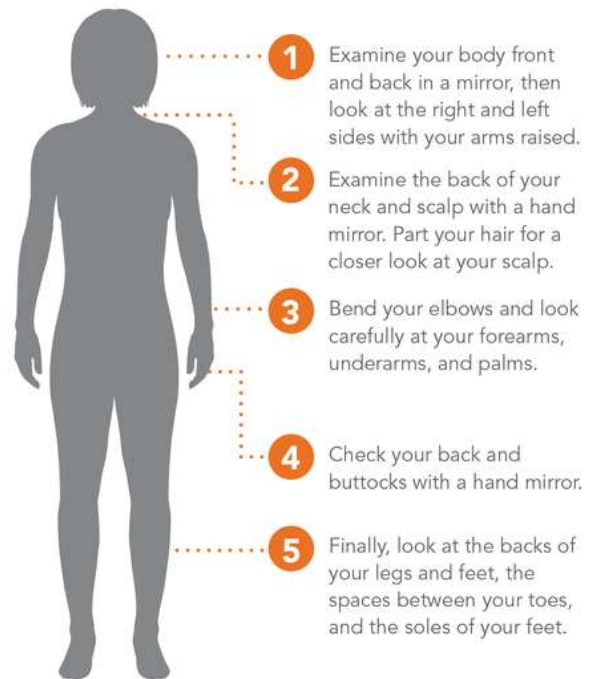
MU Health Care provides the following list of common skin cancer symptoms:

- A firm and/or red bump on the skin
- A bleeding or scabbing sore or mole that won't heal
- Skin lesions that appear scaly or crusty, which may itch or burn
- A mole that changes in color, size or feel or has an irregular boarder

Skin Cancer Self-Examination

How to Check Your Spots:

Performing a skin self-exam means taking note of all the spots on your body, from moles to freckles to age spots. Skin cancer can develop anywhere on the skin and is one of the few cancers you can usually see on your body. Ask someone for help when checking your skin, especially in hard-to-see places like the scalp and back. Follow these steps:



If you wear nail polish, remember to check your nails when the polish is removed.

If you notice a new spot or an existing spot that changes, itches, or bleeds, make an appointment to see a board-certified dermatologist.

Source: How to Spot Skin Cancer. American Academy of Dermatology Association.
<https://www.aad.org/public/diseases/skin-cancer/>

Scan here for
more information
on skin cancer.



Accessing MOPHIMS Cancer Data

MOPHIMS is a tool that is used to access many data sets including but not limited to, vital statistics, population, WIC and cancer incidence. This example will examine melanoma trends among males and females in Missouri using the Cancer Incidence MICA.



First, users will navigate to Choose Your Data under the Cancer Incidence MICA. Users can customize the Year, Geography, Age, Sex, Race, Stage at Diagnosis, and Site. For this example, changes will first be made to Year. To obtain reliable rates we will include 5 years of data beginning with the most recent year available.

A screenshot of the 'Cancer Incidence MICA' web application. The 'Choose Your Data' section is active. Under 'Year', 'Single Year(s)' is selected. A dropdown menu is open showing years from 2019 down to 2008. Years 2019, 2018, 2017, 2016, and 2015 are checked, with a '5 selected' indicator at the top of the dropdown. Other filters like Geography (Statewide), Age (Basic), Sex (All selected (2)), Race (Basic), and Stage at Diagnosis (In Situ or Invasive) are also visible.

As for age, the basic age groups will remain but users will deselect 'unknown' from the age drop down.

A close-up screenshot of the 'Age' filter dropdown menu. The 'Basic' age group option is selected. The dropdown list shows age ranges: 'Under 1', '1 - 4', '5 - 14', '15 - 24', '25 - 34', '35 - 44', '45 - 54', '55 - 64', '65 - 74', '75 - 84', and '85 and Over'. All these ranges are checked. The 'Unknown' option at the bottom is unchecked. A red arrow points to the 'Unknown' option. The '11 selected' indicator is at the top of the dropdown.

Once the years and age are selected, users will scroll to the Site. Deselect 'Select All Major Items' and scroll to 'Skin excluding basal and squamous'. Click the + sign next to this cancer site and select 'Melanoma of the skin'.

Site: To select or expand within the list, click the applicable checkbox or link.

☐ Select All Major Items [Expand Major Items](#)

☐ Select All Intermediate Items (If Major Item is selected)

More specific selections will override more general selections.

- ☐ Leukemia
- ☐ Lymphoma
- ☐ Male genital system
 - ☐ Mesothelioma
 - ☐ Miscellaneous
 - ☐ Myeloma
- ☐ Oral cavity and pharynx
- ☐ Respiratory System
- ☒ Skin excluding basal and squamous
 - ☒ Melanoma of the skin
 - ☐ Other non-epithelial skin
- ☐ Other non-epithelial skin

[Preview Selections](#)

[Reset Your Data](#)

Scroll to the Build Your Results section and click the 'Create a Chart' tab. The Type of Chart will be changed to Trend Line, and the Variable Axis will be changed to Age. Next, click the **blue** 'Create Chart' button to create the trend line shown on the following page.

Build Your Results

[Build a Table](#) [Make a Map](#) [Create a Chart](#) [Documentation / Metadata](#)

Type of Chart: Trend Line

Variable Axis: Age

Statistics: Rates

Data Label: Disabled

Note Docking: Bottom

Legend Docking: Top

Value Axis: Sex

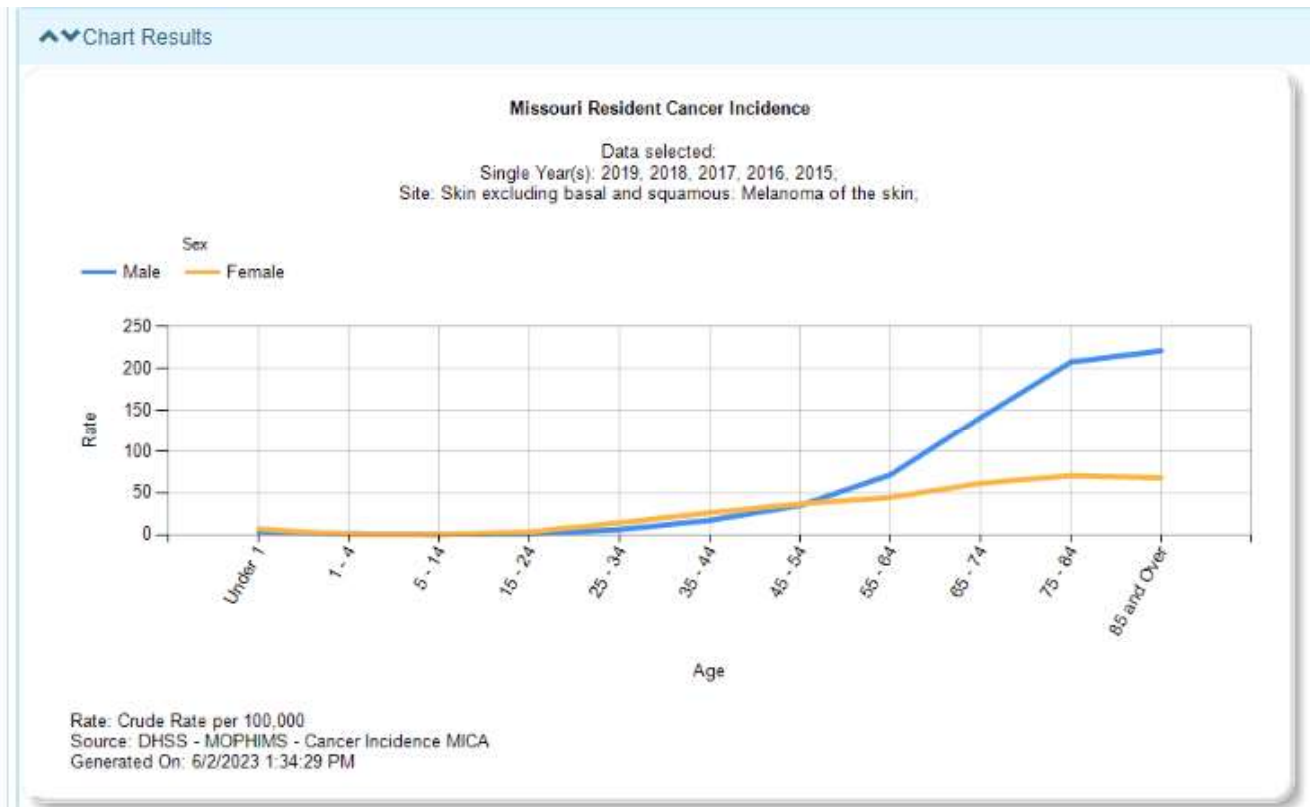
Age Adjustment Options: 2000 Standard Population

Note Alignment: Near

Legend Alignment: Near

[Create Chart](#)

From this trend line you can see the melanoma rates for males and females vary across different age groups. The female melanoma rate shown in **yellow** is slightly higher from ages 15 to 54. The melanoma rate for males shown in **blue** increases dramatically beginning at age 55. The male rate is about 3 times higher than the female rate for the 75-84 and 85 and over population.



The American Academy of Dermatology provides some insight on why melanoma rates are higher among males over 50. Research suggests women apply sunscreen more often than men through makeup products and other cosmetics containing SPF. Men also have thicker skin with less fat beneath it along with more fibers to keep the skin firm and tight. These differences can make male's skin more susceptible to damage from UV rays. Research also shows that a women's skin may be better at repairing the damage caused by UV rays.⁷

Environmental Public Health Tracking (EPHT) Program Updates



Missouri's Harvest is in Reach StoryMap

From the MOPHIMS EPHT home page, users can navigate to EPHT's Community Data page where EPHT has published "Missouri's Harvest is in Reach", a new StoryMap exploring Missouri's food access landscape. Harvest is in Reach contains interactive maps on food access and social vulnerability, expansion of food access in food insecure areas, and counties participating in the Seniors' and WIC Farmers Market Nutrition programs. In addition, there are links to listings of educational events and u-pick farms and orchards.

If you have questions or comments about the food access data, please reach out to EPHT at EPHTN@health.mo.gov.

StoryMap Link: <https://storymaps.arcgis.com/stories/a666d99491314ede80ecce3b55d4bf0c>



Missouri Tickborne Disease StoryMap

As the weather warms up, ticks are increasingly active and a threat to people and pets. From the MOPHIMS EPHT home page, users can navigate to EPHT's Health Data page, where environmental health conditions include tickborne disease. The "Missouri Tickborne Disease StoryMap" is a new StoryMap developed by the Department's Zoonotic Disease

Environmental Public Health Tracking (EPHT) Program Updates

Program and EPHT that includes interactive maps of tickborne diseases in Missouri, information on common ticks that spread them, signs and symptoms of disease and prevention measures.

If you have questions or comments about tickborne disease data, please reach out to EPHT at EPHTN@health.mo.gov or the Zoonotic Disease Program by calling **573-751-6113**.

StoryMap Link: <https://storymaps.arcgis.com/stories/d46ce3a154bf4d97bc9ba3933cd2a325>

MEHA Annual Conference in Springfield

Nicole Niehues, Melissa Reynolds and Elizabeth Semkiw attended the 2023 Missouri Environmental Health Association (MEHA) conference in Springfield, where they gave a presentation on new tools in environmental health and sewershed surveillance, including new sewershed surveillance data dashboards, the Department's new Missouri Tickborne Disease StoryMap, EPHT's new Harvest is in Reach StoryMap on Missouri's food access landscape and Missouri's new Harmful Algal Blooms map and reporting tool.

Missouri Natural Resources Annual Conference in Osage Beach

Melissa Reynolds and Jeff Wenzel attended the 2023 Missouri Natural Resources Conference (MNRC) in Osage Beach, where they spoke with attendees about environmental health issues and exhibited the Department's new Missouri Tickborne Disease StoryMap and Missouri's new Harmful Algal Blooms map and reporting tool.

Tracking Awareness Week

The theme this year is "Data for Action". Our Tracking Awareness Week (TAW) is held July 17-21, 2023. During this time, CDC, state and local health departments, partners, researchers and people interested in environmental health come together to highlight important nationwide environmental health issues and showcase the work of the Tracking Program.



MOPHIMS Practice Exercise

Here is your opportunity to test your skills and practice finding information in MOPHIMS.

If you would like to check your work, a link with possible answers will be posted below.

You have been asked to write an article about COVID-19 impacts in Missouri. You decide to use the Death MICA to find demographic information on COVID-19 deaths among adults 65 and over.

Set up your query to determine the count and rate of COVID-19 deaths in 2020 for the following groups: White Males, White Females, Black or African-American Males, and Black or African-American Females. What settings did you use?

Hint:

Step One: Choose Your Data

Step Two: Build Your Results

Step Three: Submit Query

Step Four: Review and Download Table Results

Questions:

Which group(s) have a higher death rate per 100,000 Missouri residents? Compare and contrast rates based on Race and Sex.

Which group(s) have a higher death count among Missouri residents? Compare and contrast counts based on Race and Sex.

Check your answers on page 13

Available Data & Training Updates



Maternal, Infant and Child Health MICAs

- Birth 2020
- Fertility and Pregnancy Rate 2020
- Pregnancy 2020
- WIC Child 2020
- WIC Infant 2020
- WIC Prenatal 2020
- WIC Postpartum 2020
- WIC Linked Prenatal-Postpartum 2020



Injury MICA

- Injury 2015



Hospital and Emergency Room Visit MICAs

- Emergency Room 2015
- Inpatient Hospitalizations 2015
- Preventable Hospitalizations 2015
- Procedures 2015



Chronic Disease MICAs

- Cancer Incidence 2019
- Chronic Disease Death 2019
- Chronic Disease Emergency Room 2015
- Chronic Disease Inpatient Hospitalization 2015



Death MICA

- Death 2020



Population MICA

- Population 2020

Data

The graphic to the left shows the years of data available for each MICA.

If you need more current data than what is available on MOPHIMS, please reach out and we will do our best to complete your request.

Hospital-based datasets are not being updated online yet, but we do have data through 2020 available upon request. The same is true of 2021 BRFSS survey data.

Training

We will begin offering trainings once MOPHIMS is updated with more current data.

In the meantime, if you would like an overview of the MOPHIMS system, Profiles, MICAs, and information on how to become a registered user, you can watch the MOPHIMS Demo Webinar on the department website under 'Community Health Assessment Intervention Planning' located here: <https://health.mo.gov/data/>

Additional Information About the MOPHIMS User Newsletter Group

About the Newsletter

The MOPHIMS User Group Newsletter was created in response to user requests for communication on updates to the MOPHIMS system, descriptions of new features, additional practice exercises, announcements of training opportunities and any new information about data that might help users perform their jobs more efficiently.

Newsletters will be published on a semi-annual basis. If you have ideas for content, please send them to Andrew.Hunter@health.mo.gov or Chelsea.Fife@health.mo.gov.

We would like to feature stories describing your success at completing projects or obtaining grants using the MICA or EPHT tools as well as interviews with public health professionals about your duties and how you use MICA or EPHT to accomplish them.

Past issues are available at <http://health.mo.gov/data/mica/MICA/newsletters.html>.

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How to Sign Up or Opt Out

If you have enjoyed this newsletter, please feel free to share it with your colleagues and community partners.

We encourage everyone to sign up for the User Group by sending an email to MOPHIMSUserGroup@health.mo.gov with the subject line **MOPHIMS User Group**. Include your name, position title, organization and email address. By signing up, users will be sent newsletters directly.

Occasionally we may distribute time-sensitive information on training opportunities or other topics if the newsletter is not scheduled for publication prior to a registration deadline. The MOPHIMS User Group list also helps us track the types of organizations using the tools, which is one of our performance measures.

If you would like to unsubscribe from the MOPHIMS User Group, send an e-mail with **Unsubscribe** in the subject line to MOPHIMSUserGroup@health.mo.gov.

PLEASE NOTE: Depending on your position title, you may still receive other types of e-mails from us. For example, we are requested to send training information to all LPHA Administrators, even if they have unsubscribed from the MOPHIMS User Group.

MOPHIMS Practice Exercise Solution

Step One: *Choose Your Data*

Year: Single Year(s)-2020, Geography: Statewide, Race: Basic- All selected (2), Ethnicity: All Selected (2), Sex: All selected (2), Age: Basic- 65 and Over, Cause: COVID-19

Step Two: *Build Your Results*

Build a Table:

Main Row: Race (or Sex),

Main Column: Sex (or Race),

Statistics: Counts and Rates,

Age Adjustment Options: 2000 Standard Population,

Confidence intervals: No Confidence Intervals

Step Three: *Click Submit Query*

Step Four: *Review and Download Table Results*

Answers:

Which group(s) have a higher COVID-19 death rate per 100,000 Missouri residents 65 and over? Compare and contrast rates based on Race and Sex.

The highest COVID-19 death rate is for Black or African-American males age 65 and over. In general, rates are higher for males; however, the rate for Black or African-American females is higher than the rate for White male and female.

Which group(s) have a higher death count among Missouri residents? Compare and contrast counts based on Race and Sex

The highest COVID-19 death counts are for White males age 65 and over. In general, counts are higher for White males and females with males being slightly higher to females. In contrast, the Black or African-American female count is higher to Black or African-American male.

Sources

- ¹ Sun Safety. Center for Disease Control and Prevention. Available at: https://www.cdc.gov/cancer/skin/basic_info/sun-safety.htm
- ² Tanning. The Skin Cancer Foundation. Available at: <https://skincancer.org/risk-factors/tanning/>
- ³ What is the Difference Between Melanoma and Nonmelanoma Skin Cancer. Moffitt Cancer Center. Available at: <https://moffitt.org/cancers/skin-cancer-nonmelanoma/>
- ⁴ What is Skin Cancer? Center for Disease Control and Prevention. Available at: https://www.cdc.gov/cancer/skin/basic_info/what-is-skin-cancer.htm
- ⁵ Skin Cancer and Melanoma. MU Health Care. Available at: <https://www.muhealth.org/conditions-treatments/cancer-care/melanoma-and-skin-cancer>
- ⁶ How to Spot Skin Cancer. American Academy of Dermatology Association. Available at: <https://www.aad.org/public/diseases/skin-cancer/how-to-spot-skin-cancer>
- ⁷ Melanoma Strikes Men Harder. American Academy of Dermatology Association. Available at: <https://www.aad.org/public/diseases/skin-cancer/types/common/melanoma/men-50>